

## § 572.30

made part of this regulation. The Director of the Federal Register has approved the materials incorporated by reference. For materials subject to change, only the specific version approved by the Director of the Federal Register and specified in the regulation are incorporated. A notice of any change will be published in the FEDERAL REGISTER. As a convenience to the reader, the materials incorporated by reference are listed in the Finding Aid Table found at the end of this volume of the Code of Federal Regulations.

(c) The materials incorporated by reference are available for examination in Docket 78-09, Room 5109, Docket Section, National Highway Traffic Safety Administration, 400 Seventh Street SW., Washington, DC, 20590. Copies may be obtained from Rowley-Scher Reprographics, Inc., 1216 K Street NW., Washington, DC 20005 ((202) 628-6667). The materials are also on file in the reference library of the Office of the Federal Register, National Archives and Records Administration, Washington, DC.

(d) The structural properties of the dummy are such that the dummy conforms to this part in every respect both before and after being used in vehicle tests specified in Standard No. 213 of this chapter (§ 571.213).

[50 FR 25424, June 19, 1985]

### Subpart E—Hybrid III Test Dummy

SOURCE: 51 FR 26701, July 25, 1986, unless otherwise noted.

#### § 572.30 Incorporated materials.

(a) The drawings and specifications referred to in this regulation that are not set forth in full are hereby incorporated in this part by reference. The Director of the Federal Register has approved the materials incorporated by reference. For materials subject to change, only the specific version approved by the Director of the Federal Register and specified in the regulation are incorporated. A notice of any change will be published in the FEDERAL REGISTER. As a convenience to the reader, the materials incorporated by reference are listed in the

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Finding Aid Table found at the end of this volume of the Code of Federal Regulations.

(b) The materials incorporated by reference are available for examination in the general reference section of docket 74-14, Docket Section, National Highway Traffic Safety Administration, Room 5109, 400 Seventh Street, SW., Washington, DC 20590. Copies may be obtained from Reprographic Technologies, 9000 Virginia Manor Road, Beltsville, MD 20705, Telephone (301) 210-5600, Facsimile (301) 419-5069, Attn. Mr. Jay Wall. Drawings and specifications are also on file in the reference library of the Office of the Federal Register, 800 N. Capitol Street, NW., suite 700, Washington, DC.

[51 FR 26701, July 25, 1986, as amended at 61 FR 67955, Dec. 26, 1996]

#### § 572.31 General description.

(a) The Hybrid III 50th percentile size dummy consists of components and assemblies specified in the Anthropomorphic Test Dummy drawing and specifications package which consists of the following six items:

(1) The Anthropomorphic Test Dummy Parts List, dated June 26, 1998, and containing 16 pages, and a Parts List Index, dated June 26, 1998, containing 8 pages.

(2) A listing of Hybrid III Dummy Transducers-reference document AGARD-AR-330, "Anthropomorphic Dummies for Crash and Escape System Testing", Chapter 6, Table 6-2, North Atlantic Treaty Organization, July, 1996.

(3) A General Motors Drawing Package identified by GM Drawing No. 78051-218, revision U, titled "Hybrid III Anthropomorphic Test Dummy," dated August 30, 1998, the following component assemblies, and subordinate drawings:

Drawing No.	Revision
78051-61X head assembly-complete, (May 20, 1978) .....	(T)
78051-90 neck assembly-complete, dated May 20, 1978 .....	(A)
78051-89 upper torso assembly-complete, dated May 20, 1978 .....	(K)
78051-70 lower torso assembly-complete, dated June 30, 1998, except for drawing No. 78051-55, "Instrumentation Assembly-Pelvic Accelerometer," dated August 2, 1979 .....	(F)

Drawing No.	Revision
86-5001-001 leg assembly-complete (LH), dated March 26, 1996 .....	(A)
86-5001-002 leg assembly-complete (RH), dated March 26, 1996 .....	(A)
78051-123 arm assembly-complete (LH), dated May 20, 1996 .....	(D)
78051-124 arm assembly-complete (RH), dated May 20, 1978 .....	(D)
78051-59 pelvic assembly-complete, dated June 30, 1998 .....	(G)
78051-60 pelvic structure-molded, dated June 30, 1998 .....	(E)

(4) Disassembly, Inspection, Assembly and Limbs Adjustment Procedures for the Hybrid III dummy, dated June 1998.

(5) Sign Convention for signal outputs—reference document SAE J1733 Information Report, titled “Sign Convention for Vehicle Crash Testing”, dated 1994-12.

(6) Exterior dimensions of the Hybrid III dummy, dated July 15, 1986.

(b) [Reserved]

(c) Adjacent segments are joined in a manner such that throughout the range of motion and also under crash-impact conditions, there is no contact between metallic elements except for contacts that exist under static conditions.

(d) The weights, inertial properties and centers of gravity location of component assemblies shall conform to those listed in drawing 78051-338, revision S, titled “Segment Weights, Inertial Properties, Center of Gravity Location—Hybrid III,” dated May 20, 1978 of drawing No. 78051-218.

(e) The structural properties of the dummy are such that the dummy conforms to this part in every respect both before and after being used in vehicle test specified in Standard No. 208 of this chapter (§ 571.208).

[51 FR 26701, July 25, 1986, as amended at 53 FR 8764, Mar. 17, 1988; 57 FR 47010, Oct. 14, 1992; 61 FR 67955, Dec. 26, 1996; 62 FR 27514, May 20, 1997; 63 FR 5747, Feb. 4, 1998; 63 FR 53851, Oct. 7, 1998]

#### § 572.32 Head.

(a) The head consists of the assembly shown in drawing 78051-61X, revision C, and conforms to each of the drawings subtended therein.

(b) When the head (Drawing number 78051-61X, titled “head assembly—complete,” dated March 28, 1997 (Revision C) with six axis neck transducer structural replacement (Drawing number 78051-383X, Revision P, titled “Neck Transducer Structural Replacement,” dated November 1, 1995) is dropped from a height of 14.8 inches in accordance with paragraph (c) of this section, the peak resultant accelerations at the location of the accelerometers mounted in the head in accordance with § 572.36(c) shall not be less than 225g, and not more than 275g. The acceleration/time curve for the test shall be unimodal to the extent that oscillations occurring after the main acceleration pulse are less than ten percent (zero to peak) of the main pulse. The lateral acceleration vector shall not exceed 15g (zero to peak).

(c) *Test procedure.* (1) Soak the head assembly in a test environment at any temperature between 66 degrees F to 78 degrees F and at a relative humidity from 10% to 70% for a period of at least four hours prior to its application in a test.

(2) Clean the head's skin surface and the surface of the impact plate with 1,1,1 Trichlorethane or equivalent.

(3) Suspend the head, as shown in Figure 19, so that the lowest point on the forehead is 0.5 inches below the lowest point on the dummy's nose when the midsagittal plane is vertical.